

CLAIMS:

1. (Currently amended) A method of affecting ~~neurogenesis~~ new neuron growth in a patient comprising the step of:

administering to a patient in need thereof a therapeutic amount of a therapeutic compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of neurogenesis post stroke wherein increased levels of cGMP result in ~~neurogenesis~~ new neuron growth.

Claims 2-5 (Canceled)

6. (Currently amended) A method of augmenting the production of neurons in a patient by administering to a patient in need thereof an effective amount of a therapeutic compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors that increases levels of cGMP, to a site in need of augmentation, wherein increased levels of cGMP augment the production of new neurons.

7. (Currently amended) A method of increasing neurological function in a patient by administering to a patient in need thereof an effective amount of a therapeutic compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors that increases levels of cGMP to a patient in need of increased neurological function after neurological damage has occurred, whereby the increased levels of cGMP create ~~neurogenesis~~ new neuron growth, thereby increasing neurological function.

8. (Currently amended) A method of increasing cognitive and neurological function in a patient by administering an effective amount of a therapeutic compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of increased cognitive and neurological function after neurological and

cognitive damage has occurred, whereby the increased levels of cGMP create ~~neurogenesis~~ new neuron growth, thereby increasing neurological function.

9. (Currently amended) A method of affecting ~~neurogenesis~~ new neuron growth in a patient comprising the step of administering to a patient in need thereof an effective amount of a compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors for increasing levels of cGMP in a patient in need of ~~neurogenesis~~ new neuron growth, wherein increased levels of cGMP result in ~~neurogenesis~~ new neuron growth.

10. (Currently amended) A method of augmenting the production of neurons in a patient by administering to a patient in need thereof an effective amount of a compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors for increasing cGMP levels at a site in need of augmentation, wherein increased levels of cGMP augment the production of new neurons.

11. (Currently amended) A method of increasing neurological function in a patient by administering to a patient in need thereof an effective amount of a compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors for increasing levels of cGMP in a patient in need of increased neurological function, wherein increased levels of cGMP increase neurological function.

12. (Currently amended) A method of increasing cognitive and neurological function in a patient by administering to a patient in need thereof an effective amount of a compound selected from the group of ~~phosphodiesterase inhibitors~~, L-arginine, sildenafil, ~~and statins~~, and phosphodiesterase inhibitors for increasing levels of cGMP in a patient in need of increased cognitive and neurological function, wherein increased levels of cGMP result in ~~neurogenesis~~ new neuron growth, thereby increasing cognitive and neurological function.

Claim 13 (canceled)